ELSEVIER

Chemical Physics 209 (1996) 421–425

Chemical Physics

Author index to volume 209

Aguilar, A., see González, M. 209 (1996) 355
Aguilar, A., see Romero, T. 209 (1996) 217
Aguillon, F., see Sizun, M. 209 (1996) 327
Albertí, M., see Romero, T. 209 (1996) 217
Alcaraz, C., see Dutuit, O. 209 (1996) 177
Anderson, J.E., see Cooper, G. 209 (1996) 61
Aquilanti, V., D. Cappelletti and F. Pirani, Range and strength of interatomic forces: dispersion and induction contributions to the bonds of dications and of ionic molecules 209 (1996) 299
Aquilanti, V., S. Cavalli, C. Coletti and G. Grossi, Alternative Sturmian bases and momentum space orbitals: an application to the hydrogen molecular ion 209 (1996) 405

Bassi, D., see Tosi, P. 209 (1996) 227
Bastida, A. and F.X. Gadea, Simulation of the Ar_3^+ absorption spectrum using Molecular Dynamics 209 (1996) 291
Bennett, F.R., J.P. Maier, G. Chambaud and P. Rosmus, Photodissociation, charge and atom transfer processes in electronically excited states of N_3^+ 209 (1996) 275
Bennington, S.M., see Fillaux, F. 209 (1996) 111
Berthomieu, D., see Dutuit, O. 209 (1996) 259
Bieske, E.J., see Ruchti, T. 209 (1996) 169
Billing, G.D. and N. Marković, Semi-classical treatment of chemical reactions 209 (1996) 377
Billing, G.D., see Sizun, M. 209 (1996) 327
Blasco, R.M., see González, M. 209 (1996) 355
Blunt, V.M., N. Mina-Camilde, D.L. Cedeño and C. Manzanares I, Vibrational overtone spectroscopy of CH_2D_2 in liquid argon solutions 209 (1996) 79
Bougeard, D., see Ermoshin, V.A. 209 (1996) 41
Brion, C.E., see Cooper, G. 209 (1996) 61
Brunetti, B., S. Falcinelli, A. Sassara, J. de Andres and F. Vecchiocattivi, Auto-ionization of the collisional complexes of metastable neon and H_2, D_2, or HD 209 (1996) 205

Cappelletti, D., see Aquilanti, V. 209 (1996) 299
Cappelletti, D., see Tosi, P. 209 (1996) 227
Cavalli, S., see Aquilanti, V. 209 (1996) 405
Cedeño, D.L., see Blunt, V.M. 209 (1996) 79
Chambaud, G., see Bennett, F.R. 209 (1996) 275
Chergui, M., see Gödderz, K.H. 209 (1996) 91
Coletti, C., see Aquilanti, V. 209 (1996) 405
Colominas, C., see Orozco, M. 209 (1996) 19

Connelly, J.P., see Ruchti, T. 209 (1996) 169
Cooper, G., J.E. Anderson and C.E. Brion, Absolute photoabsorption and photoionization of formaldehyde in the VUV and soft X-ray regions (3–200 eV) 209 (1996) 61

De Andrés, J., see Romero, T. 209 (1996) 217
De Andres, J., see Brunetti, B. 209 (1996) 205
Delboulbé, A., see Richard-Viard, M. 209 (1996) 159
Delvai, C., see Tosi, P. 209 (1996) 227
Delwiche, J., see Hubin-Franskin, M.-J. 209 (1996) 143
Dmitriev, O., see Tosi, P. 209 (1996) 227
Dutuit, O., C. Alcaraz, D. Gerlich, P.M. Guyon, J. Hepburn, C. Métayer-Zeitoun, J.B. Ozenne, M. Schweizer and T. Weng, A state-selected study of $Ar^+(^2P_{3/2,1/2}) + O_2$ charge transfer at collision energies below 4 eV using synchrotron radiation and guided beam techniques 209 (1996) 177
Dutuit, O., H. Palm, D. Berthomieu and Z. Herman, Reactions of H^-, D^- and HD^- transfer between an ethylene cation and propane $CH_3CD_2CH_3$: a study of kinetics using state-selected reactants 209 (1996) 259
Dutuit, O., see Hubin-Franskin, M.-J. 209 (1996) 143

Ermoshin, V.A., K.S. Smirnov and D. Bougeard, Ab initio generalized valence force field for zeolite modelling. 2. Aluminosilicates 209 (1996) 41

Falcinelli, S., see Brunetti, B. 209 (1996) 205
Fillaux, F., S.M. Bennington, J. Tomkinson and L.T. Yu, Inelastic neutron-scattering study of free proton dynamics in γ-MnO_2 209 (1996) 111
Flament, J.-P., see Hubin-Franskin, M.-J. 209 (1996) 143

Gadea, F.X. and I. Paidarová, Ab initio calculations for Ar_2^+, He_2^+ and He_3^+, of interest for the modelling of ionic rare-gas clusters 209 (1996) 281
Gadea, F.X., see Bastida, A. 209 (1996) 291
Gerlich, D., see Dutuit, O. 209 (1996) 177
Gerlich, D., see Mark, S. 209 (1996) 235
Gerlich, D., see Paul, W. 209 (1996) 265
Giménez, X., see González, M. 209 (1996) 355
Gödderz, K.H., N. Schwentner and M. Chergui, Absorption by dissociative continua and Rydberg states in condensed matter: HCl in rare gas matrices 209 (1996) 91
González, M., R.M. Blasco, X. Giménez and A. Aguilar, A quasiclassical and approximate quantum mechanical study of the intramolecular isotope effect in proton transfer elementary reactions: the $Ne + HD^+ \rightarrow NeH^+(NeD^+) + D(H)$ system at low and moderate collision energies (0.02–0.77 eV) 209 (1996) 355
Gordon, E., see Mackenzie, S.R. 209 (1996) 127
Grossi, G., see Aquilanti, V. 209 (1996) 405
Grycuk, T., see Helmi, M.S. 209 (1996) 53
Guyon, P.-M., see Hubin-Franskin, M.-J. 209 (1996) 143
Guyon, P.M., see Dutuit, O. 209 (1996) 177

Halse, E.J., see Mackenzie, S.R. 209 (1996) 127
Helmi, M.S., T. Grycuk and G.D. Roston, Interaction potentials of Cd–Xe from temperature dependent absorption spectra 209 (1996) 53

Hepburn, J., see Dutuit, O. 209 (1996) 177
Herman, Z., see Dutuit, O. 209 (1996) 259
Hubin-Franskin, M.-J., J. Delwiche, P.-M. Guyon, M. Richard-Viard, M. Lavollée, O. Dutuit, J.-M. Robbe and J.-P. Flament, Dissociation of the COS^+ ion by photoionisation: experiment and ab initio calculations The $\tilde{A}$–$\tilde{X}$ Franck–Condon energy gap and the $\tilde{A}\,^2\Pi$, $\tilde{B}\,^2\Sigma^+$ vibronic state Franck–Condon energy regions 209 (1996) 143

Kuntz, P.J., I. Paidarová and R. Polák, Theoretical charge-transfer cross sections for $H^+ + HCl(X\,^1\Sigma^+) \rightarrow H(^2S_g) + HCl^+(A\,^2\Sigma^+)$ II: classical path trajectory calculations 209 (1996) 389

Lavollée, M., see Hubin-Franskin, M.-J. 209 (1996) 143
Lee, S.-L., see Slanina, Z. 209 (1996) 13
Lucas, J.M., see Romero, T. 209 (1996) 217
Lücke, B., see Paul, W. 209 (1996) 265
Luque, F.J., see Orozco, M. 209 (1996) 19

Mackenzie, S.R., E.J. Halse, E. Gordon, D. Rolland and T.P. Softley, Pulsed-field ionization spectroscopy of CO via the $E\,^1\Pi$ state and NO via the $B\,^2\Pi$ state 209 (1996) 127
Maier, J.P., see Bennett, F.R. 209 (1996) 275
Maier, J.P., see Ruchti, T. 209 (1996) 169
Manzanares I, C., see Blunt, V.M. 209 (1996) 79
Mark, S. and D. Gerlich, Differential cross sections, measured with guided ion beams: applications to $N^+ + N_2$ and $C_2H_2^+ + C_2D_4$ collisions 209 (1996) 235
Marković, N., see Billing, G.D. 209 (1996) 377
Marković, N., see Sizun, M. 209 (1996) 327
Métayer-Zeitoun, C., see Dutuit, O. 209 (1996) 177
Mina-Camilde, N., see Blunt, V.M. 209 (1996) 79

Niehaus, A., see Uiterwaal, C.J.G.J. 209 (1996) 195

Orozco, M., C. Colominas and F.J. Luque, Theoretical determination of the solvation free energy in water and chloroform of the nucleic acid bases 209 (1996) 19
Osawa, E., see Slanina, Z. 209 (1996) 13
Ozenne, J.B., see Dutuit, O. 209 (1996) 177

Paidarová, I., see Gadea, F.X. 209 (1996) 281
Paidarová, I., see Kuntz, P.J. 209 (1996) 389
Palm, H., see Dutuit, O. 209 (1996) 259
Paul, W., S. Schlemmer, B. Lücke and D. Gerlich, Deuteration of positive hydrogen cluster ions H_5^+ to H_{17}^+ at 10 K 209 (1996) 265
Personov, R.I., see Vainer, Yu.G. 209 (1996) 101
Pirani, F., see Aquilanti, V. 209 (1996) 299
Plakhotnik, T.V., see Vainer, Yu.G. 209 (1996) 101
Polák, R., see Kuntz, P.J. 209 (1996) 389

Richard-Viard, M., A. Delboulbé and M. Vervloet, Experimental study of the dissociation of selected internal energy ions produced in low quantities: application to N_2O^+ ions in the Franck–Condon gap and to small ionic water clusters 209 (1996) 159
Richard-Viard, M., see Hubin-Franskin, M.-J. 209 (1996) 143

Robbe, J.-M., see Hubin-Franskin, M.-J. 209 (1996) 143
Rohrbacher, A., see Ruchti, T. 209 (1996) 169
Rolland, D., see Mackenzie, S.R. 209 (1996) 127
Romero, T., J. de Andrés, M. Albertí, J.M. Lucas and A. Aguilar, Electronic excitation processes in the collisional system $Na(3^2S) + Rb^+(^1S) \rightarrow Na^* + Rb^+(^1S)$ by crossed molecular beams in the 0.1–5.0 keV energy range 209 (1996) 217
Rosmus, P., see Bennett, F.R. 209 (1996) 275
Roston, G.D., see Helmi, M.S. 209 (1996) 53
Ruchti, T., A. Rohrbacher, T. Speck, J.P. Connelly, E.J. Bieske and J.P. Maier, An electron impact ionization slit-jet apparatus for laser absorption spectroscopy 209 (1996) 169

Sassara, A., see Brunetti, B. 209 (1996) 205
Schlemmer, S., see Paul, W. 209 (1996) 265
Schweizer, M., see Dutuit, O. 209 (1996) 177
Schwentner, N., see Gödderz, K.H. 209 (1996) 91
Sidis, V., Diabatic excited states of the $(HeH_2)^+$ molecular ion for the charge exchange–excitation reaction: $He^+ + H_2 \rightarrow HeH^+ + H^*$ 209 (1996) 313
Sidis, V., see Sizun, M. 209 (1996) 327
Sizun, M., F. Aguillon, V. Sidis, V. Zenevich, G.D. Billing and N. Marković, Theoretical investigation of the $Ar^+(J) + H_2 \rightarrow ArH^+ + H$ reaction: semiclassical coupled wavepacket treatment 209 (1996) 327
Slanina, Z., S.-L. Lee, M. Yoshida and E. Ōsawa, Computations on nineteen isolated-pentagon-rule isomers of C_{86} 209 (1996) 13
Smirnov, K.S., see Ermoshin, V.A. 209 (1996) 41
Softley, T.P., see Mackenzie, S.R. 209 (1996) 127
Speck, T., see Ruchti, T. 209 (1996) 169

Tomkinson, J., see Fillaux, F. 209 (1996) 111
Tosi, P., C. Delvai, D. Bassi, O. Dmitriev, D. Cappelletti and F. Vecchiocattivi, Charge transfer of krypton ions with methane molecules from thermal energy to 10 eV 209 (1996) 227

Uiterwaal, C.J.G.J., J. van der Weg, J. van Eck, P.A. Zeijlmans van Emmichoven and A. Niehaus, Charge transfer and atomic rearrangement in collisions of $Ar^+(^2P_{1/2,3/2})$ with H_2 measured with a new PEPICO apparatus 209 (1996) 195

Vainer, Yu.G., T.V. Plakhotnik and R.I. Personov, Dephasing and diffusional linewidths in spectra of doped amorphous solids: comparison of photon echo and single molecule spectroscopy data for terrylene in polyethylene 209 (1996) 101
Van der Weg, J., see Uiterwaal, C.J.G.J. 209 (1996) 195
Van Eck, J., see Uiterwaal, C.J.G.J. 209 (1996) 195
Varandas, A.J.C. and H.G. Yu, Spectral quantization of transition state resonances in collinear $Mu + H_2$ and $Mu + D_2$ collisions 209 (1996) 31
Vecchiocattivi, F., see Brunetti, B. 209 (1996) 205
Vecchiocattivi, F., see Tosi, P. 209 (1996) 227
Vervloet, M., see Richard-Viard, M. 209 (1996) 159
Vojtík, J., Theoretical picture of the dynamics of the autoionization event in $He(2^3S)$–H_2 Penning ionization: collision energy dependence 209 (1996) 367

Weiss, U., see Winterstetter, M. 209 (1996) 1
Weng, T., see Dutuit, O. 209 (1996) 177
Winterstetter, M. and U. Weiss, Dynamical simulations for dissipative multi-state systems: discretized integral equation approach 209 (1996) 1

Yoshida, M., see Slanina, Z. 209 (1996) 13
Yu, H.G., see Varandas, A.J.C. 209 (1996) 31
Yu, L.T., see Fillaux, F. 209 (1996) 111

Zeijlmans van Emmichoven, P.A., see Uiterwaal, C.J.G.J. 209 (1996) 195
Zenevich, V., see Sizun, M. 209 (1996) 327

ELSEVIER

Chemical Physics 209 (1996) 426–436

Chemical Physics

Subject index to volume 209

Methods

Theoretical

Group theory and algebras

Alternative Sturmian bases and momentum space orbitals: an application to the hydrogen molecular ion, V. Aquilanti, S. Cavalli, C. Coletti and G. Grossi 209 (1996) 405

Classical mechanics

Theoretical charge-transfer cross sections for $H^+ + HCl(X\,^1\Sigma^+) \rightarrow H(^2S_g) + HCl^+(A\,^2\Sigma^+)$ II: classical path trajectory calculations, P.J. Kuntz, I. Paidarová and R. Polák 209 (1996) 389

Transport quantum mechanics

Dynamical simulations for dissipative multi-state systems: discretized integral equation approach, M. Winterstetter and U. Weiss 209 (1996) 1

Equilibrium statistical mechanics

Computations on nineteen isolated-pentagon-rule isomers of C_{86}, Z. Slanina, S.-L. Lee, M. Yoshida and E. Ōsawa 209 (1996) 13

Ab initio schemes for stationary properties

Computations on nineteen isolated-pentagon-rule isomers of C_{86}, Z. Slanina, S.-L. Lee, M. Yoshida and E. Ōsawa 209 (1996) 13

Ab initio generalized valence force field for zeolite modelling. 2. Aluminosilicates, V.A. Ermoshin, K.S. Smirnov and D. Bougeard 209 (1996) 41

Photodissociation, charge and atom transfer processes in electronically excited states of N_3^+, F.R. Bennett, J.P. Maier, G. Chambaud and P. Rosmus 209 (1996) 275

Ab initio calculations for Ar_2^+, He_2^+ and He_3^+, of interest for the modelling of ionic rare-gas clusters, F.X. Gadea and I. Paidarová 209 (1996) 281

Range and strength of interatomic forces: dispersion and induction contributions to the bonds of dications and of ionic molecules, V. Aquilanti, D. Cappelletti and F. Pirani 209 (1996) 299

Alternative Sturmian bases and momentum space orbitals: an application to the hydrogen molecular ion, V. Aquilanti, S. Cavalli, C. Coletti and G. Grossi 209 (1996) 405

Computational and simulation methods

Dynamical simulations for dissipative multi-state systems: discretized integral equation approach, M. Winterstetter and U. Weiss 209 (1996) 1

Computations on nineteen isolated-pentagon-rule isomers of C_{86}, Z. Slanina, S.-L. Lee, M. Yoshida and E. Ōsawa 209 (1996) 13
Theoretical determination of the solvation free energy in water and chloroform of the nucleic acid bases, M. Orozco, C. Colominas and F.J. Luque 209 (1996) 19
Spectral quantization of transition state resonances in collinear $Mu + H_2$ and $Mu + D_2$ collisions, A.J.C. Varandas and H.G. Yu 209 (1996) 31
Ab initio generalized valence force field for zeolite modelling. 2. Aluminosilicates, V.A. Ermoshin, K.S. Smirnov and D. Bougeard 209 (1996) 41
Ab initio calculations for Ar_2^+, He_2^+ and He_3^+, of interest for the modelling of ionic rare-gas clusters, F.X. Gadea and I. Paidarová 209 (1996) 281
Simulation of the Ar_3^+ absorption spectrum using Molecular Dynamics, A. Bastida and F.X. Gadea 209 (1996) 291
Theoretical investigation of the $Ar^+(J) + H_2 \rightarrow ArH^+ + H$ reaction: semiclassical coupled wavepacket treatment, M. Sizun, F. Aguillon, V. Sidis, V. Zenevich, G.D. Billing and N. Marković 209 (1996) 327
Theoretical picture of the dynamics of the autoionization event in $He(2^3S)$–H_2 Penning ionization: collision energy dependence, J. Vojtík 209 (1996) 367
Theoretical charge-transfer cross sections for $H^+ + HCl(X^1\Sigma^+) \rightarrow H(^2S_g) + HCl^+(A^2\Sigma^+)$ II: classical path trajectory calculations, P.J. Kuntz, I. Paidarová and R. Polák 209 (1996) 389

Molecular dynamics and scattering theory

Spectral quantization of transition state resonances in collinear $Mu + H_2$ and $Mu + D_2$ collisions, A.J.C. Varandas and H.G. Yu 209 (1996) 31
Ab initio generalized valence force field for zeolite modelling. 2. Aluminosilicates, V.A. Ermoshin, K.S. Smirnov and D. Bougeard 209 (1996) 41
Charge transfer and atomic rearrangement in collisions of $Ar^+(^2P_{1/2,3/2})$ with H_2 measured with a new PEPICO apparatus, C.J.G.J. Uiterwaal, J. van der Weg, J. van Eck, P.A. Zeijlmans van Emmichoven and A. Niehaus 209 (1996) 195
Charge transfer of krypton ions with methane molecules from thermal energy to 10 eV, P. Tosi, C. Delvai, D. Bassi, O. Dmitriev, D. Cappelletti and F. Vecchiocattivi 209 (1996) 227
Diabatic excited states of the $(HeH_2)^+$ molecular ion for the charge exchange–excitation reaction: $He^+ + H_2 \rightarrow HeH^+ + H^*$, V. Sidis 209 (1996) 313
Theoretical investigation of the $Ar^+(J) + H_2 \rightarrow ArH^+ + H$ reaction: semiclassical coupled wavepacket treatment, M. Sizun, F. Aguillon, V. Sidis, V. Zenevich, G.D. Billing and N. Marković 209 (1996) 327
A quasiclassical and approximate quantum mechanical study of the intramolecular isotope effect in proton transfer elementary reactions: the $Ne + HD^+ \rightarrow NeH^+(NeD^+) + D(H)$ system at low and moderate collision energies (0.02–0.77 eV), M. González, R.M. Blasco, X. Giménez and A. Aguilar 209 (1996) 355
Theoretical picture of the dynamics of the autoionization event in $He(2^3S)$–H_2 Penning ionization: collision energy dependence, J. Vojtík 209 (1996) 367
Semi-classical treatment of chemical reactions, G.D. Billing and N. Marković 209 (1996) 377

Experimental

Visible and UV spectroscopy

Interaction potentials of Cd–Xe from temperature dependent absorption spectra, M.S. Helmi, T. Grycuk and G.D. Roston 209 (1996) 53

An electron impact ionization slit-jet apparatus for laser absorption spectroscopy, T. Ruchti, A. Rohrbacher, T. Speck, J.P. Connelly, E.J. Bieske and J.P. Maier 209 (1996) 169

Fluorescence spectroscopy

Electronic excitation processes in the collisional system $Na(3\,^2S) + Rb^+(^1S) \rightarrow Na^* + Rb^+(^1S)$ by crossed molecular beams in the 0.1–5.0 keV energy range, T. Romero, J. de Andrés, M. Albertí, J.M. Lucas and A. Aguilar 209 (1996) 217

Photoelectron and Auger spectroscopy

Dissociation of the COS^+ ion by photoionisation: experiment and ab initio calculations The $\tilde{A}$–$\tilde{X}$ Franck–Condon energy gap and the $\tilde{A}\,^2\Pi$, $\tilde{B}\,^2\Sigma^+$ vibronic state Franck–Condon energy regions, M.-J. Hubin-Franskin, J. Delwiche, P.-M. Guyon, M. Richard-Viard, M. Lavollée, O. Dutuit, J.-M. Robbe and J.-P. Flament 209 (1996) 143

Charge transfer and atomic rearrangement in collisions of $Ar^+(^2P_{1/2,3/2})$ with H_2 measured with a new PEPICO apparatus, C.J.G.J. Uiterwaal, J. van der Weg, J. van Eck, P.A. Zeijlmans van Emmichoven and A. Niehaus 209 (1996) 195

Electron impact spectroscopy

Absolute photoabsorption and photoionization of formaldehyde in the VUV and soft X-ray regions (3–200 eV), G. Cooper, J.E. Anderson and C.E. Brion 209 (1996) 61

Laser methods

Vibrational overtone spectroscopy of CH_2D_2 in liquid argon solutions, V.M. Blunt, N. Mina-Camilde, D.L. Cedeño and C. Manzanares I 209 (1996) 79

Pulsed-field ionization spectroscopy of CO via the $E\,^1\Pi$ state and NO via the $B\,^2\Pi$ state, S.R. Mackenzie, E.J. Halse, E. Gordon, D. Rolland and T.P. Softley 209 (1996) 127

An electron impact ionization slit-jet apparatus for laser absorption spectroscopy, T. Ruchti, A. Rohrbacher, T. Speck, J.P. Connelly, E.J. Bieske and J.P. Maier 209 (1996) 169

Synchrotron spectroscopies

Absorption by dissociative continua and Rydberg states in condensed matter: HCl in rare gas matrices, K.H. Gödderz, N. Schwentner and M. Chergui 209 (1996) 91

Dissociation of the COS^+ ion by photoionisation: experiment and ab initio calculations The $\tilde{A}$–$\tilde{X}$ Franck–Condon energy gap and the $\tilde{A}\,^2\Pi$, $\tilde{B}\,^2\Sigma^+$ vibronic state Franck–Condon energy regions, M.-J. Hubin-Franskin, J. Delwiche, P.-M. Guyon, M. Richard-Viard, M. Lavollée, O. Dutuit, J.-M. Robbe and J.-P. Flament 209 (1996) 143

Experimental study of the dissociation of selected internal energy ions produced in low quantities: application to N_2O^+ ions in the Franck–Condon gap and to small ionic water clusters, M. Richard-Viard, A. Delboulbé and M. Vervloet 209 (1996) 159

A state-selected study of $Ar^+(^2P_{3/2,1/2}) + O_2$ charge transfer at collision energies below 4 eV using synchrotron radiation and guided beam techniques, O. Dutuit, C. Alcaraz, D. Gerlich, P.M. Guyon, J. Hepburn, C. Métayer-Zeitoun, J.B. Ozenne, M. Schweizer and T. Weng 209 (1996) 177

Reactions of H^-, D^- and HD^- transfer between an ethylene cation and propane $CH_3CD_2CH_3$: a study of kinetics using state-selected reactants, O. Dutuit, H. Palm, D. Berthomieu and Z. Herman 209 (1996) 259

Coherent optical spectroscopy
Dephasing and diffusional linewidths in spectra of doped amorphous solids: comparison of photon echo and single molecule spectroscopy data for terrylene in polyethylene, Yu.G. Vainer, T.V. Plakhotnik and R.I. Personov 209 (1996) 101

Multiple resonance spectroscopy
Pulsed-field ionization spectroscopy of CO via the $E\,^1\Pi$ state and NO via the $B\,^2\Pi$ state, S.R. Mackenzie, E.J. Halse, E. Gordon, D. Rolland and T.P. Softley 209 (1996) 127

Optoacoustic spectroscopy
Vibrational overtone spectroscopy of CH_2D_2 in liquid argon solutions, V.M. Blunt, N. Mina-Camilde, D.L. Cedeño and C. Manzanares I 209 (1996) 79

Atomic and molecular beam techniques
Auto-ionization of the collisional complexes of metastable neon and H_2, D_2, or HD, B. Brunetti, S. Falcinelli, A. Sassara, J. de Andres and F. Vecchiocattivi 209 (1996) 205
Electronic excitation processes in the collisional system $Na(3\,^2S) + Rb^+(^1S) \rightarrow Na^* + Rb^+(^1S)$ by crossed molecular beams in the 0.1–5.0 keV energy range, T. Romero, J. de Andrés, M. Albertí, J.M. Lucas and A. Aguilar 209 (1996) 217
Charge transfer of krypton ions with methane molecules from thermal energy to 10 eV, P. Tosi, C. Delvai, D. Bassi, O. Dmitriev, D. Cappelletti and F. Vecchiocattivi 209 (1996) 227
Differential cross sections, measured with guided ion beams: applications to $N^+ + N_2$ and $C_2H_2^+ + C_2D_4$ collisions, S. Mark and D. Gerlich 209 (1996) 235

Time-resolved experiments
Dephasing and diffusional linewidths in spectra of doped amorphous solids: comparison of photon echo and single molecule spectroscopy data for terrylene in polyethylene, Yu.G. Vainer, T.V. Plakhotnik and R.I. Personov 209 (1996) 101
Experimental study of the dissociation of selected internal energy ions produced in low quantities: application to N_2O^+ ions in the Franck–Condon gap and to small ionic water clusters, M. Richard-Viard, A. Delboulbé and M. Vervloet 209 (1996) 159

Mass spectrometry
Absolute photoabsorption and photoionization of formaldehyde in the VUV and soft X-ray regions (3–200 eV), G. Cooper, J.E. Anderson and C.E. Brion 209 (1996) 61
Dissociation of the COS^+ ion by photoionisation: experiment and ab initio calculations The $\tilde{A}$–$\tilde{X}$ Franck–Condon energy gap and the $\tilde{A}\,^2\Pi$, $\tilde{B}\,^2\Sigma^+$ vibronic state Franck–Condon energy regions, M.-J. Hubin-Franskin, J. Delwiche, P.-M. Guyon, M. Richard-Viard, M. Lavollée, O. Dutuit, J.-M. Robbe and J.-P. Flament 209 (1996) 143
Charge transfer and atomic rearrangement in collisions of $Ar^+(^2P_{1/2,3/2})$ with H_2 measured with a new PEPICO apparatus, C.J.G.J. Uiterwaal, J. van der Weg, J. van Eck, P.A. Zeijlmans van Emmichoven and A. Niehaus 209 (1996) 195
Charge transfer of krypton ions with methane molecules from thermal energy to 10 eV, P. Tosi, C. Delvai, D. Bassi, O. Dmitriev, D. Cappelletti and F. Vecchiocattivi 209 (1996) 227
Differential cross sections, measured with guided ion beams: applications to $N^+ + N_2$ and $C_2H_2^+ + C_2D_4$ collisions, S. Mark and D. Gerlich 209 (1996) 235
Reactions of H^-, D^- and HD^- transfer between an ethylene cation and propane $CH_3CD_2CH_3$: a study of kinetics using state-selected reactants, O. Dutuit, H. Palm, D. Berthomieu and Z. Herman 209 (1996) 259

Deuteration of positive hydrogen cluster ions H_3^+ to H_{17}^+ at 10 K, W. Paul, S. Schlemmer, B. Lücke and D. Gerlich 209 (1996) 265

Neutron scattering
Inelastic neutron-scattering study of free proton dynamics in γ-MnO_2, F. Fillaux, S.M. Bennington, J. Tomkinson and L.T. Yu 209 (1996) 111

Field emission and field ionization
Pulsed-field ionization spectroscopy of CO via the $E\,^1\Pi$ state and NO via the $B\,^2\Pi$ state, S.R. Mackenzie, E.J. Halse, E. Gordon, D. Rolland and T.P. Softley 209 (1996) 127

Objects

Bulk systems

Gases
Reactions of H^-, D^- and HD^- transfer between an ethylene cation and propane $CH_3CD_2CH_3$: a study of kinetics using state-selected reactants, O. Dutuit, H. Palm, D. Berthomieu and Z. Herman 209 (1996) 259
Semi-classical treatment of chemical reactions, G.D. Billing and N. Marković 209 (1996) 377

Supersonic beams
An electron impact ionization slit-jet apparatus for laser absorption spectroscopy, T. Ruchti, A. Rohrbacher, T. Speck, J.P. Connelly, E.J. Bieske and J.P. Maier 209 (1996) 169

Liquid mixtures and solutions
Theoretical determination of the solvation free energy in water and chloroform of the nucleic acid bases, M. Orozco, C. Colominas and F.J. Luque 209 (1996) 19
Vibrational overtone spectroscopy of CH_2D_2 in liquid argon solutions, V.M. Blunt, N. Mina-Camilde, D.L. Cedeño and C. Manzanares I 209 (1996) 79

Crystals
Ab initio generalized valence force field for zeolite modelling. 2. Aluminosilicates, V.A. Ermoshin, K.S. Smirnov and D. Bougeard 209 (1996) 41

Glasses
Dephasing and diffusional linewidths in spectra of doped amorphous solids: comparison of photon echo and single molecule spectroscopy data for terrylene in polyethylene, Yu.G. Vainer, T.V. Plakhotnik and R.I. Personov 209 (1996) 101

Polymers
Dephasing and diffusional linewidths in spectra of doped amorphous solids: comparison of photon echo and single molecule spectroscopy data for terrylene in polyethylene, Yu.G. Vainer, T.V. Plakhotnik and R.I. Personov 209 (1996) 101

Biological systems
Theoretical determination of the solvation free energy in water and chloroform of the nucleic acid bases, M. Orozco, C. Colominas and F.J. Luque 209 (1996) 19

Microscopic systems

Atoms

Inelastic neutron-scattering study of free proton dynamics in γ-MnO_2, F. Fillaux, S.M. Bennington, J. Tomkinson and L.T. Yu 209 (1996) 111
Alternative Sturmian bases and momentum space orbitals: an application to the hydrogen molecular ion, V. Aquilanti, S. Cavalli, C. Coletti and G. Grossi 209 (1996) 405

Molecules (neutral and ionic)

Spectral quantization of transition state resonances in collinear $Mu + H_2$ and $Mu + D_2$ collisions, A.J.C. Varandas and H.G. Yu 209 (1996) 31
Absorption by dissociative continua and Rydberg states in condensed matter: HCl in rare gas matrices, K.H. Gödderz, N. Schwentner and M. Chergui 209 (1996) 91
Charge transfer and atomic rearrangement in collisions of $Ar^+(^2P_{1/2,3/2})$ with H_2 measured with a new PEPICO apparatus, C.J.G.J. Uiterwaal, J. van der Weg, J. van Eck, P.A. Zeijlmans van Emmichoven and A. Niehaus 209 (1996) 195
Auto-ionization of the collisional complexes of metastable neon and H_2, D_2, or HD, B. Brunetti, S. Falcinelli, A. Sassara, J. de Andres and F. Vecchiocattivi 209 (1996) 205
Simulation of the Ar_3^+ absorption spectrum using Molecular Dynamics, A. Bastida and F.X. Gadea 209 (1996) 291
Semi-classical treatment of chemical reactions, G.D. Billing and N. Marković 209 (1996) 377
Theoretical charge-transfer cross sections for $H^+ + HCl(X\,^1\Sigma^+) \rightarrow H(^2S_g) + HCl^+(A\,^2\Sigma^+)$ II: classical path trajectory calculations, P.J. Kuntz, I. Paidarová and R. Polák 209 (1996) 389

-diatomic

Absorption by dissociative continua and Rydberg states in condensed matter: HCl in rare gas matrices, K.H. Gödderz, N. Schwentner and M. Chergui 209 (1996) 91
Pulsed-field ionization spectroscopy of CO via the $E\,^1\Pi$ state and NO via the $B\,^2\Pi$ state, S.R. Mackenzie, E.J. Halse, E. Gordon, D. Rolland and T.P. Softley 209 (1996) 127
An electron impact ionization slit-jet apparatus for laser absorption spectroscopy, T. Ruchti, A. Rohrbacher, T. Speck, J.P. Connelly, E.J. Bieske and J.P. Maier 209 (1996) 169
A state-selected study of $Ar^+(^2P_{3/2,1/2}) + O_2$ charge transfer at collision energies below 4 eV using synchrotron radiation and guided beam techniques, O. Dutuit, C. Alcaraz, D. Gerlich, P.M. Guyon, J. Hepburn, C. Métayer-Zeitoun, J.B. Ozenne, M. Schweizer and T. Weng 209 (1996) 177
Electronic excitation processes in the collisional system $Na(3\,^2S) + Rb^+(^1S) \rightarrow Na^* + Rb^+(^1S)$ by crossed molecular beams in the 0.1–5.0 keV energy range, T. Romero, J. de Andrés, M. Albertí, J.M. Lucas and A. Aguilar 209 (1996) 217
Differential cross sections, measured with guided ion beams: applications to $N^+ + N_2$ and $C_2H_2^+ + C_2D_4$ collisions, S. Mark and D. Gerlich 209 (1996) 235
Ab initio calculations for Ar_2^+, He_2^+ and He_3^+, of interest for the modelling of ionic rare-gas clusters, F.X. Gadea and I. Paidarová 209 (1996) 281
Range and strength of interatomic forces: dispersion and induction contributions to the bonds of dications and of ionic molecules, V. Aquilanti, D. Cappelletti and F. Pirani 209 (1996) 299
Theoretical picture of the dynamics of the autoionization event in $He(2\,^3S)$–H_2 Penning ionization: collision energy dependence, J. Vojtík 209 (1996) 367
Alternative Sturmian bases and momentum space orbitals: an application to the hydrogen molecular ion, V. Aquilanti, S. Cavalli, C. Coletti and G. Grossi 209 (1996) 405

-small polyatomics

Absolute photoabsorption and photoionization of formaldehyde in the VUV and soft X-ray regions (3–200 eV), G. Cooper, J.E. Anderson and C.E. Brion 209 (1996) 61

Vibrational overtone spectroscopy of CH_2D_2 in liquid argon solutions, V.M. Blunt, N. Mina-Camilde, D.L. Cedeño and C. Manzanares I 209 (1996) 79

Dissociation of the COS^+ ion by photoionisation: experiment and ab initio calculations The $\tilde{A}$–$\tilde{X}$ Franck–Condon energy gap and the $\tilde{A}\,^2\Pi$, $\tilde{B}\,^2\Sigma^+$ vibronic state Franck–Condon energy regions, M.-J. Hubin-Franskin, J. Delwiche, P.-M. Guyon, M. Richard-Viard, M. Lavollée, O. Dutuit, J.-M. Robbe and J.-P. Flament 209 (1996) 143

Experimental study of the dissociation of selected internal energy ions produced in low quantities: application to N_2O^+ ions in the Franck–Condon gap and to small ionic water clusters, M. Richard-Viard, A. Delboulbé and M. Vervloet 209 (1996) 159

Charge transfer of krypton ions with methane molecules from thermal energy to 10 eV, P. Tosi, C. Delvai, D. Bassi, O. Dmitriev, D. Cappelletti and F. Vecchiocattivi 209 (1996) 227

Differential cross sections, measured with guided ion beams: applications to $N^+ + N_2$ and $C_2H_2^+ + C_2D_4$ collisions, S. Mark and D. Gerlich 209 (1996) 235

Diabatic excited states of the $(HeH_2)^+$ molecular ion for the charge exchange–excitation reaction: $He^+ + H_2 \rightarrow HeH^+ + H^*$, V. Sidis 209 (1996) 313

A quasiclassical and approximate quantum mechanical study of the intramolecular isotope effect in proton transfer elementary reactions: the $Ne + HD^+ \rightarrow NeH^+(NeD^+) + D(H)$ system at low and moderate collision energies (0.02–0.77 eV), M. González, R.M. Blasco, X. Giménez and A. Aguilar 209 (1996) 355

-polymeric and biological

Dynamical simulations for dissipative multi-state systems: discretized integral equation approach, M. Winterstetter and U. Weiss 209 (1996) 1

Molecular aggregates

-dimers

Interaction potentials of Cd–Xe from temperature dependent absorption spectra, M.S. Helmi, T. Grycuk and G.D. Roston 209 (1996) 53

Range and strength of interatomic forces: dispersion and induction contributions to the bonds of dications and of ionic molecules, V. Aquilanti, D. Cappelletti and F. Pirani 209 (1996) 299

-van der Waals molecules

Interaction potentials of Cd–Xe from temperature dependent absorption spectra, M.S. Helmi, T. Grycuk and G.D. Roston 209 (1996) 53

-clusters

Computations on nineteen isolated-pentagon-rule isomers of C_{86}, Z. Slanina, S.-L. Lee, M. Yoshida and E. Ōsawa 209 (1996) 13

Deuteration of positive hydrogen cluster ions H_5^+ to H_{17}^+ at 10 K, W. Paul, S. Schlemmer, B. Lücke and D. Gerlich 209 (1996) 265

Ab initio calculations for Ar_2^+, He_2^+ and He_3^+, of interest for the modelling of ionic rare-gas clusters, F.X. Gadea and I. Paidarová 209 (1996) 281

Simulation of the Ar_3^+ absorption spectrum using Molecular Dynamics, A. Bastida and F.X. Gadea 209 (1996) 291

Ions and charge carriers
A state-selected study of $Ar^+(^2P_{3/2,1/2}) + O_2$ charge transfer at collision energies below 4 eV using synchrotron radiation and guided beam techniques, O. Dutuit, C. Alcaraz, D. Gerlich, P.M. Guyon, J. Hepburn, C. Métayer-Zeitoun, J.B. Ozenne, M. Schweizer and T. Weng 209 (1996) 177
Reactions of H^-, D^- and HD^- transfer between an ethylene cation and propane $CH_3CD_2CH_3$: a study of kinetics using state-selected reactants, O. Dutuit, H. Palm, D. Berthomieu and Z. Herman 209 (1996) 259
Range and strength of interatomic forces: dispersion and induction contributions to the bonds of dications and of ionic molecules, V. Aquilanti, D. Cappelletti and F. Pirani 209 (1996) 299

Phenomena

Molecular structure
Computations on nineteen isolated-pentagon-rule isomers of C_{86}, Z. Slanina, S.-L. Lee, M. Yoshida and E. Ōsawa 209 (1996) 13

Vibrations and rotations of molecules
Ab initio generalized valence force field for zeolite modelling. 2. Aluminosilicates, V.A. Ermoshin, K.S. Smirnov and D. Bougeard 209 (1996) 41
Vibrational overtone spectroscopy of CH_2D_2 in liquid argon solutions, V.M. Blunt, N. Mina-Camilde, D.L. Cedeño and C. Manzanares I 209 (1996) 79

Electronic structure and states
Interaction potentials of Cd–Xe from temperature dependent absorption spectra, M.S. Helmi, T. Grycuk and G.D. Roston 209 (1996) 53
Absolute photoabsorption and photoionization of formaldehyde in the VUV and soft X-ray regions (3–200 eV), G. Cooper, J.E. Anderson and C.E. Brion 209 (1996) 61
Electronic excitation processes in the collisional system $Na(3\,^2S) + Rb^+(^1S) \rightarrow Na^* + Rb^+(^1S)$ by crossed molecular beams in the 0.1–5.0 keV energy range, T. Romero, J. de Andrés, M. Albertí, J.M. Lucas and A. Aguilar 209 (1996) 217
Photodissociation, charge and atom transfer processes in electronically excited states of N_3^+, F.R. Bennett, J.P. Maier, G. Chambaud and P. Rosmus 209 (1996) 275
Ab initio calculations for Ar_2^+, He_2^+ and He_3^+, of interest for the modelling of ionic rare-gas clusters, F.X. Gadea and I. Paidarová 209 (1996) 281
Alternative Sturmian bases and momentum space orbitals: an application to the hydrogen molecular ion, V. Aquilanti, S. Cavalli, C. Coletti and G. Grossi 209 (1996) 405

Molecular interactions
Theoretical determination of the solvation free energy in water and chloroform of the nucleic acid bases, M. Orozco, C. Colominas and F.J. Luque 209 (1996) 19
Spectral quantization of transition state resonances in collinear $Mu + H_2$ and $Mu + D_2$ collisions, A.J.C. Varandas and H.G. Yu 209 (1996) 31
Absorption by dissociative continua and Rydberg states in condensed matter: HCl in rare gas matrices, K.H. Gödderz, N. Schwentner and M. Chergui 209 (1996) 91
Range and strength of interatomic forces: dispersion and induction contributions to the bonds of dications and of ionic molecules, V. Aquilanti, D. Cappelletti and F. Pirani 209 (1996) 299

Diabatic excited states of the $(HeH_2)^+$ molecular ion for the charge exchange–excitation reaction: $He^+ + H_2 \rightarrow HeH^+ + H^*$, V. Sidis 209 (1996) 313

Spectral bandshapes and intensities

Simulation of the Ar_3^+ absorption spectrum using Molecular Dynamics, A. Bastida and F.X. Gadea 209 (1996) 291

Coupling of electronic and nuclear motion

Dynamical simulations for dissipative multi-state systems: discretized integral equation approach, M. Winterstetter and U. Weiss 209 (1996) 1

Electronic excitation processes in the collisional system $Na(3^2S) + Rb^+(^1S) \rightarrow Na^* + Rb^+(^1S)$ by crossed molecular beams in the 0.1–5.0 keV energy range, T. Romero, J. de Andrés, M. Albertí, J.M. Lucas and A. Aguilar 209 (1996) 217

Diabatic excited states of the $(HeH_2)^+$ molecular ion for the charge exchange–excitation reaction: $He^+ + H_2 \rightarrow HeH^+ + H^*$, V. Sidis 209 (1996) 313

Theoretical investigation of the $Ar^+(J) + H_2 \rightarrow ArH^+ + H$ reaction: semiclassical coupled wavepacket treatment, M. Sizun, F. Aguillon, V. Sidis, V. Zenevich, G.D. Billing and N. Marković 209 (1996) 327

Energy transfer processes

Inelastic neutron-scattering study of free proton dynamics in γ-MnO_2, F. Fillaux, S.M. Bennington, J. Tomkinson and L.T. Yu 209 (1996) 111

Molecular photophysical processes

Absorption by dissociative continua and Rydberg states in condensed matter: HCl in rare gas matrices, K.H. Gödderz, N. Schwentner and M. Chergui 209 (1996) 91

Photodissociation, charge and atom transfer processes in electronically excited states of N_3^+, F.R. Bennett, J.P. Maier, G. Chambaud and P. Rosmus 209 (1996) 275

Intramolecular dynamics

Dissociation of the COS^+ ion by photoionisation: experiment and ab initio calculations The $\tilde{A}$–$\tilde{X}$ Franck–Condon energy gap and the $\tilde{A}^2\Pi$, $\tilde{B}^2\Sigma^+$ vibronic state Franck–Condon energy regions, M.-J. Hubin-Franskin, J. Delwiche, P.-M. Guyon, M. Richard-Viard, M. Lavollée, O. Dutuit, J.-M. Robbe and J.-P. Flament 209 (1996) 143

Deuteration of positive hydrogen cluster ions H_5^+ to H_{17}^+ at 10 K, W. Paul, S. Schlemmer, B. Lücke and D. Gerlich 209 (1996) 265

Coherence loss processes

Dephasing and diffusional linewidths in spectra of doped amorphous solids: comparison of photon echo and single molecule spectroscopy data for terrylene in polyethylene, Yu.G. Vainer, T.V. Plakhotnik and R.I. Personov 209 (1996) 101

Reactions (including dissociation)

A state-selected study of $Ar^+(^2P_{3/2,1/2}) + O_2$ charge transfer at collision energies below 4 eV using synchrotron radiation and guided beam techniques, O. Dutuit, C. Alcaraz, D. Gerlich, P.M. Guyon, J. Hepburn, C. Métayer-Zeitoun, J.B. Ozenne, M. Schweizer and T. Weng 209 (1996) 177

Charge transfer of krypton ions with methane molecules from thermal energy to 10 eV, P. Tosi, C. Delvai, D. Bassi, O. Dmitriev, D. Cappelletti and F. Vecchiocattivi 209 (1996) 227

A quasiclassical and approximate quantum mechanical study of the intramolecular isotope effect in proton transfer elementary reactions: the Ne + $HD^+ \rightarrow NeH^+(NeD^+) + D(H)$ system at low and moderate collision energies (0.02–0.77 eV), M. González, R.M. Blasco, X. Giménez and A. Aguilar 209 (1996) 355

-gas phase

Spectral quantization of transition state resonances in collinear Mu + H_2 and Mu + D_2 collisions, A.J.C. Varandas and H.G. Yu 209 (1996) 31

Interaction potentials of Cd–Xe from temperature dependent absorption spectra, M.S. Helmi, T. Grycuk and G.D. Roston 209 (1996) 53

Experimental study of the dissociation of selected internal energy ions produced in low quantities: application to N_2O^+ ions in the Franck–Condon gap and to small ionic water clusters, M. Richard-Viard, A. Delboulbé and M. Vervloet 209 (1996) 159

A state-selected study of $Ar^+(^2P_{3/2,1/2}) + O_2$ charge transfer at collision energies below 4 eV using synchrotron radiation and guided beam techniques, O. Dutuit, C. Alcaraz, D. Gerlich, P.M. Guyon, J. Hepburn, C. Métayer-Zeitoun, J.B. Ozenne, M. Schweizer and T. Weng 209 (1996) 177

Charge transfer and atomic rearrangement in collisions of $Ar^+(^2P_{1/2,3/2})$ with H_2 measured with a new PEPICO apparatus, C.J.G.J. Uiterwaal, J. van der Weg, J. van Eck, P.A. Zeijlmans van Emmichoven and A. Niehaus 209 (1996) 195

Auto-ionization of the collisional complexes of metastable neon and H_2, D_2, or HD, B. Brunetti, S. Falcinelli, A. Sassara, J. de Andres and F. Vecchiocattivi 209 (1996) 205

Differential cross sections, measured with guided ion beams: applications to $N^+ + N_2$ and $C_2H_2^+ + C_2D_4$ collisions, S. Mark and D. Gerlich 209 (1996) 235

Reactions of H^-, D^- and HD^- transfer between an ethylene cation and propane $CH_3CD_2CH_3$: a study of kinetics using state-selected reactants, O. Dutuit, H. Palm, D. Berthomieu and Z. Herman 209 (1996) 259

Photodissociation, charge and atom transfer processes in electronically excited states of N_3^+, F.R. Bennett, J.P. Maier, G. Chambaud and P. Rosmus 209 (1996) 275

Diabatic excited states of the $(HeH_2)^+$ molecular ion for the charge exchange–excitation reaction: $He^+ + H_2 \rightarrow HeH^+ + H^*$, V. Sidis 209 (1996) 313

Theoretical investigation of the $Ar^+(J) + H_2 \rightarrow ArH^+ + H$ reaction: semiclassical coupled wavepacket treatment, M. Sizun, F. Aguillon, V. Sidis, V. Zenevich, G.D. Billing and N. Marković 209 (1996) 327

A quasiclassical and approximate quantum mechanical study of the intramolecular isotope effect in proton transfer elementary reactions: the Ne + $HD^+ \rightarrow NeH^+(NeD^+) + D(H)$ system at low and moderate collision energies (0.02–0.77 eV), M. González, R.M. Blasco, X. Giménez and A. Aguilar 209 (1996) 355

Semi-classical treatment of chemical reactions, G.D. Billing and N. Marković 209 (1996) 377

Theoretical charge-transfer cross sections for $H^+ + HCl(X\,^1\Sigma^+) \rightarrow H(^2S_g) + HCl^+(A\,^2\Sigma^+)$ II: classical path trajectory calculations, P.J. Kuntz, I. Paidarová and R. Polák 209 (1996) 389

Electron transfer

Dynamical simulations for dissipative multi-state systems: discretized integral equation approach, M. Winterstetter and U. Weiss 209 (1996) 1

Photodissociation, charge and atom transfer processes in electronically excited states of N_3^+, F.R. Bennett, J.P. Maier, G. Chambaud and P. Rosmus 209 (1996) 275

Theoretical charge-transfer cross sections for $H^+ + HCl(X\,^1\Sigma^+) \rightarrow H(^2S_g) + HCl^+(A\,^2\Sigma^+)$ II: classical path trajectory calculations, P.J. Kuntz, I. Paidarová and R. Polák 209 (1996) 389

Ionization (including Rydberg states)
Absolute photoabsorption and photoionization of formaldehyde in the VUV and soft X-ray regions (3–200 eV), G. Cooper, J.E. Anderson and C.E. Brion 209 (1996) 61
Pulsed-field ionization spectroscopy of CO via the $E\,^1\Pi$ state and NO via the $B\,^2\Pi$ state, S.R. Mackenzie, E.J. Halse, E. Gordon, D. Rolland and T.P. Softley 209 (1996) 127
Theoretical picture of the dynamics of the autoionization event in $He(2\,^3S)$–H_2 Penning ionization: collision energy dependence, J. Vojtík 209 (1996) 367

Isotopic effects
Deuteration of positive hydrogen cluster ions H_5^+ to H_{17}^+ at 10 K, W. Paul, S. Schlemmer, B. Lücke and D. Gerlich 209 (1996) 265
A quasiclassical and approximate quantum mechanical study of the intramolecular isotope effect in proton transfer elementary reactions: the $Ne + HD^+ \rightarrow NeH^+(NeD^+) + D(H)$ system at low and moderate collision energies (0.02–0.77 eV), M. González, R.M. Blasco, X. Giménez and A. Aguilar 209 (1996) 355